



UNIVERSITE DE LUBUMBASHI FACULTE POLYTECHNIQUE



# CONCEPT NOTE: Launch of the Centre of Excellence for Advanced Battery Research in DRC

Date: 20-21 April 2022 (TBC) Place: Lubumbashi, DRC

#### 1. Context

On 24 and 25 November 2021, the DRC government organized the 'DRC Africa Business Forum' on 'Fostering the development of a battery, electric vehicle, and renewable energy industry value chain and market in Africa' under the patronage of H.E. Félix Antoine Tshisekedi Tshilombo, President of DRC. During the Presidential Debates in the Palais du Peuple, the Zambian Head of state, H.E. Hakainde Hichilema, expressed his willingness to join his Congolese homologue in the effort of establishing a battery minerals industry in the DRC using the mineral resources of the DRC, Zambia and of other African countries.

The Bloomberg study presented during the Forum reveals that DRC has a comparative advantage in producing NMC battery precursors. Besides, a panel of experts around the '*Skills for Battery Development in DRC*' at 'Rawbank Breakfast' was organized. Discussions revolve around the means and ways to design an education program to upgrade current workforce and while equipping the future one with the education and necessary skills for the advancement and maintenance of electric drive vehicles; but also on how African countries can leverage on education cooperation and complementarity of skills to meet such needs across the value chain.

As a result of these discussions, the **University of Lubumbashi (UNILU)** has committed to cooperate with **Steinbeis Global Institute (SGIT)** which is part of the Steinbeis University in Germany and the Japanese Lithium Ion Battery Technology and Evaluation Center (LIBTEC) to set up an advanced Battery Research Center in the DRC, with support of the UNECA, DGNI Deutsche Gesellschaft für nachhaltige Industrialisierung UG and Export-Akademie Baden-Württemberg GmbH.

The Cooperation will be extended to the **University of Zambia (UNZA)**, the **Copper Belt University (CBU)** and other leading Universities, Research Institutes/Centres and Research & Development Associations in Africa.

The Centre aims at creating relevant skills and competences, including through technical and vocational education and training (TVET). DRC and Africa's often cited demographic dividend, the aspirations of its youth and the skill requirements of the economy - all hinge on well-functioning skills development programmes, which should be a key national priority. The Centre will address emerging skills and competency needs for the battery industry as well as improving employment linkages and fostering the emergence of capable, competent, and competitive local suppliers of goods and services, including small and medium-scale enterprises, linking local content policies, licensing and contracts, entrepreneurship development and TVET programs accordingly for better outcomes.

The Centre will support the emergence of a competitive battery, electric car and renewable energy value chain in Africa, which is an effective way of augmenting the number of better-paying and higher-skilled jobs in regions dominated by mining activities; and strengthening the resilience of local economies. This will reduce poverty and improve the welfare of the population - especially vulnerable groups such as youth, once they are trained and get the relevant skills set.

#### 2. Objective

The main objective of the Centre is to support the development of a competitive battery, electric car and renewable energy value chain in Africa, through training higher-skilled workers. To this end, the official launching ceremony will bring together UNILU, SGIT, UNZA and CBU and other partners to lay the ground of the of the Centre of Excellence for Advanced Battery Research.

## **3. Expected participants**

The Centre of Excellence is expected to attract high-level representatives of teaching institutions (universities, TVET, training centres (centres de formation)), governments, the investment community, industrialists, and other interested parties from Africa and beyond; especially those playing leading roles in education, mining and in the battery, electric vehicle, and renewable energy value chain.

Key participants will include:

- DRC and Zambian authorities and relevant public institutions
- Universities and Professional training institutions (TVET) : UNILU, SGIT, UNIKIN, UNZA, CBU, etc.
- Mining companies
- Private financial institutions (commercial banks, insurance companies, etc.)
- Development banks (Africa Finance Corporation, AfreximBank, African Development Bank, BADEA, World Bank, etc.)
- FEC Fédération des Entreprises du Congo
- Chambre des Mines RDC
- Development partners

# 4. Agenda of the event

The proposed schedule is as follows:

AGENDA OF THE EVENT DAY 1: APRIL 18, 2022		
<b>09:30 – 10:00</b> 09:30 – 09:40 09:40 – 09:50 09:50 – 10:00	<ul> <li>Opening session</li> <li>Opening remarks from UNECA</li> <li>Presentation of participants</li> <li>Adoption of the program for the meeting</li> </ul>	
10:00 – 13:00	Skills profile for the battery value chain	
10:00 – 10:30 10:30 – 11:00	<ul> <li>Presentation: Mining / Battery Company 1</li> <li>Presentation: Mining / Battery Company 2</li> </ul>	
11:00 – 11:30	Coffee break	
11:30 – 12:30 12:30 – 13:00	<ul><li>Presentation: Mining Company 3</li><li>Discussions</li></ul>	
13:00 – 14:00	Lunch break	
<b>14:00 – 15:00</b> 14:00 – 15:00	<ul> <li>Dialogue between Education Institutions and the Battery Value-Chain</li> <li>Industrialist         <ul> <li>Inventory of training related to the battery industry value chain</li> <li>Universities: UNZA, UNILU, CBU, Steinbeis University</li> </ul> </li> </ul>	
15:00 – 15:30	Coffee break	
15:30 – 16:30 16:30 – 17:00 17:00 – 18:00	<ul> <li>Training centers: INPP, Mutoshi, Salama</li> <li>Discussion: What do we need to augment and what is already there?</li> <li>Dual approach in training: experience from Japan (prof. C. Otchia)</li> </ul>	
	DAY 2: APRIL 19, 2022	
09:00 – 13:00	Dialogue between training institutions and the industry	
09:00 – 09:30 09:30 – 10:00	<ul><li>What partnerships?</li><li>What is happening abroad?</li></ul>	
10:00 – 10:30	Coffee break	
10:30 – 13:00	Development and validation of the curriculum	
13:00 – 14:00	Lunch break	

14:00 – 15:00	<ul> <li>Requirements for establishing the Centre: equipment, training for trainers, budget Legal Framework</li> <li>Equipment and Labs</li> <li>Human Resource capital(capacity strengthening and development for trainers)</li> <li>Other material resources</li> </ul>	
15:00 – 15:30	Coffee break	
15:30 – 16:30	<ul> <li>The role of multistakeholders partnership (DFIs, including, BADEA, AfDB, Afreximbank, TDB, DBSA, UN Agencies(ILO, UNIDO, UNESCO), Foundations,)</li> </ul>	
	DAY 3: APRIL 20, 2022	
10:00 – 11:00	Meeting between the Minister of industry and the founding partners	
11:00 – 12:00	Visit of the campus of university of Lubumbashi and its faculty of Polytechnics, the R&D labs	
13:30 – 16:00	Visit of some mining companies	
	DAY 4: APRIL 21, 2022	
09:00 – 13:00	Special purpose vehicles	
09:00 – 09:30 09:30 – 10:00	<ul><li>Presentation by Sara Lemei</li><li>Discussion</li></ul>	
10:00 – 10:30	Coffee break	
10:30 – 13:00	Discussion session with financiers and the business community	
13:00 – 14:00	Lunch break	
14:00 – 16:00	TBD	
14:00 – 14:30	• TBD	
14:30 – 16:00	• TBD	
DAY 5: APRIL 22, 2022		
09:00 – 13:00	Launching ceremony	
09:00 - 09:10 09:10 - 09:20 09:20 - 09:40 09:40 - 09:50 09:50 - 10:10 10:10 - 10:20 10:20 - 10:30 10:30 - 10:40	<ul> <li>Welcome remarks by H.E. the Governor of Haut-Katanga</li> <li>Speech by the Rector of the University of Lubumbashi</li> <li>A word from the representatives of UNZA, CBU</li> <li>Speech by Steinbeis institute</li> <li>Remarks by the German minister of Science and Research (online)</li> <li>Speech by the Zambian minister of commerce and trade</li> <li>Speech by the DRC minister of industry</li> </ul>	

10:40 – 11:00	Signing ceremony presided by UNECA
11:00 – 12:00	Cocktail

### 5. Expected outcomes

This event will lead to the following:

- 1. The development of a draft curriculum of professional trainings relevant for the battery precursors industry.
- 2. Conclusion of non-binding agreements between educational institutions, mining companies, the financial sector to operationalize the Center.



#### Under the patronage of

**Partners** 

